

Beyond Writing Next: A Discussion of Writing Research and Instructional Uncertainty

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Drawing on their experiences as high school writing instructors, researchers, and teacher trainers, David Coker and William Lewis examine an often overlooked dimension of adolescent literacy: writing proficiency. The authors explore recent research on the skills and strategies students need in order to write with competence and describe analyses of interventions that help students attain writing mastery. They also address divisions and gaps in the field of writing research and instruction and offer suggestions for overcoming these rifts in order to advance understanding of adolescent writing development and effective writing instruction.

I had not a dispute but a disquisition with Dilke, on various subjects; several things dovetailed in my mind, & at once it struck me, what quality went to form a Man of Achievement especially in literature & which Shakespeare possessed so enormously - I mean Negative Capability, that is when man is capable of being in uncertainties, Mysteries, doubts without any irritable reaching after fact & reason.

-John Keats, in a letter to his brothers, George and Thomas

Although the specific "disquisition" that Keats (1795) describes in his famous letter to his brothers has long been forgotten, Keats's expression of his theory of "negative capability" has not. In this short passage to George and Thomas, Keats gave voice to the aesthetic of a generation of Romantic thinkers and writers who celebrated human intuition, embraced the uncertainty of the universe, and lauded the writers and the writing process that could probe its subtle mysteries. While Keats was describing what he believed to be an essential trait of the successful poet - a type of aesthetic and spiritual flexibility - he could just as easily have been describing the role that today's educators often must adopt when considering how to communicate the mysteries of effective writing to adolescent student writers, who so desperately need help. However, unlike the liberating conception of negative capability that Keats advances, the "uncertainties, Mysteries and doubts" as to what constitutes effective writing instruction are not at all liberating to teachers who are looking for concrete solutions to these problems. Teachers are frustrated and confused as they search for reasoned approaches to teaching writing effectively and for research that can help them make crucial instructional decisions to help their students.

The purpose of this article is to address the important role that writing plays in adolescent literacy and to suggest ways of giving classroom teachers the tools to help students develop the writing skills they need for future success. As former high school writing teachers who are currently researchers of writing and instructors of writing courses for elementary and middle school teachers and teacher candidates, we understand how important this knowledge is to those who are going into these classrooms. Moreover, our experience informs our understanding of how unprepared and anxious many teachers feel when it comes to teaching and assessing student writing. However, we also understand the complexity and tensions in the field of writing research and how they impact the ways research is translated into practice.

To provide a context for understanding both the importance and complexity of the topic, we begin by situating writing within a broader discussion of adolescent literacy. We examine recent research that details the current crisis in the writing proficiency of American students and the relatively stagnant literacy development of students in middle and high schools (Graham & Perin, 2007a). We then explore the difficulty of mastering the cognitive processes behind writing well and discuss analyses of writing interventions that have proven effective in helping students master these processes. We begin with a discussion of three recent publications by Steve Graham and Dolores Perin (2007a, 2007b, 2007c) in which they review the latest research on writing instruction in secondary schools. The first of these publications, *Writing Next* (Graham & Perin, 2007a), can be seen as a companion to a widely distributed report on adolescent reading called *Reading Next* (Biancarosa & Snow, 2004) ; both were commissioned by the Carnegie Corporation of New York. However, because it offers a meta-analysis of recent empirical research rather than a survey of the literature, *Writing Next* differs considerably from *Reading Next* in its scope and methods. The second paper (Graham & Perin, 2007c) provides a detailed technical discussion of the meta-analysis of the

learning-to-write studies described in *Writing Next*. The third paper (Graham & Perin, 2007b) extends the authors' instructional recommendations by synthesizing single-subject and qualitative studies of adolescent writing that were excluded from the *Writing Next* meta-analysis.

Together, these papers provide a useful "state-of-the-field" report and offer teachers a reasonable approach to choosing strategies that can meet the needs of their students. Nevertheless, there is still a lot to be learned about effective writing instruction. There are a number of divisions within the field that impede the development and application of effective approaches to teaching writing. One of these impediments is the significant bifurcation in the literature about what constitutes effective research on writing. This bifurcation is characterized as the divide between the quantitative writing research conducted in educational psychology and the more qualitative and descriptive research primarily conducted in composition studies. Other divisions that we address include the gap between writing researchers and the instructors of pre- and in-service teachers, the divide between school and workplace writing, and the great divide between high- and low-performing adolescent writers that can emerge from these previous divisions. We argue that these divides can lead to more confusion among educators and to the need for more "negative capability" on their part. We conclude this article with some suggestions for bridging these gaps in order to create "positive capability" that can change the direction of adolescent literacy development by creating instructional knowledge and giving students the skills they need to become efficient writers in a variety of contexts.

Reading, Writing, and Postsecondary Literacy

Although a great deal of attention has been focused on adolescent literacy in the last decade, most of that attention has been directed toward reading rather than writing (Graham & Perin, 2007a). Although writing and reading are related processes, as Graham and Perin point out in *Writing Next*, there are considerable differences between these two literacy activities. When reading a text, individuals form mental representations of words produced by others, usually outside of the immediate reading context. In contrast, writers not only have to formulate their own thoughts but also organize and transcribe those mental representations into words that can transcend time and place, a process that few people would describe as undemanding.

In order to communicate skillfully, writers must balance a variety of considerations when they compose, including grammar, spelling, form, and organization, as well as the needs of their audience and their reasons for writing for that audience (Harris, Schmidt, & Graham, 1997; Harris & Graham, 1999). Research into the cognitive processes of expert writers has clearly demonstrated that effective and skilled writing is neither a natural consequence of language development (Graham & Harris, 1988) nor an organic unfolding of natural developmental processes. Writing is a complicated activity that is dependent on a rich assortment of cognitive processes and on the social context of the writer (Bereiter & Scardamalia, 1987; Hayes, 1996).

The difficulty inherent in achieving a mature writing level is reflected in research showing that American students have significant difficulty with narrative and informative writing (Harris & Graham, 1999), and that the argumentative writing of most American students is "poorly reasoned and unpersuasive" (Ferretti, MacArthur, & Dowdy, 2000; Harris & Graham, 1999). This is particularly true when it comes to the writing of learning-disabled students, who often demonstrate inadequate skill in planning and revising (Ferretti et al., 2000; Graham & Harris, 1999) and difficulty with mechanics, choosing topics, and producing and organizing text (De La Paz, 1997; Graham & Harris, 1988; Graham & Harris, 1999). Although many adolescents also struggle with reading, they are not confronted with these particular cognitive challenges during the reading process.

Recent research demonstrates that writing problems are not getting better. According to a recent report from the National Assessment of Educational Progress (NAEP), approximately 70 percent of students in grades four, eight, and twelve were deemed "low-achieving" writers who wrote at or below the basic level (Persky, Daane, & Jin, 2003) and failed to meet the NAEP proficiency goals for writing (Graham & Perin, 2007a). Not surprisingly, a recent report commissioned by the ACT (2005) found that one-third of high school students who plan to attend college do not meet the readiness standards for college composition courses, a finding that Graham and Perin (2007a) predict will make it difficult for these students to learn effectively in college. Students must be able to competently plan, write, evaluate, and revise texts in order to learn the academic material that they will face in higher education and to frame the material that they will be required to present in written compositions (Graham & Perin, 2007a).

Even more problematic is the impact poor writing skills may have on these students as they enter the workplace and the increasing importance writing plays as a "gatekeeping" skill in workplace environments. As was reported by the National Commission on Writing (2004, 2005), the writing skills of employees and job applicants play an important role in promotion and hiring decisions made by businesses and other institutions. Moreover, the importance of good writing to American companies and governmental agencies is certainly demonstrated in the large amounts of money these institutions are willing to spend to improve workers' basic writing skills. According to surveys of human resource directors, U.S. corporations spend an estimated \$3.1 billion annually to remediate their employees' writing skills, and state governments spend an estimated \$221 million annually for the same purpose (National Commission on Writing, 2005).

It is not surprising that workplace writing is so beleaguered. As Beaufort (2006) suggests, because of the varied and complicated tasks associated with workplace writing and the multiple settings in which it must occur, writing well requires employees to "research" the practices, purposes, and values of their particular workplace discourse communities. Learning to clear these multiple hurdles - including the demands of quickly advancing technology, knowledge of multiple written genres, the communal nature of workplace writing, and writing ownership - can be very difficult indeed. Workplace writing is not only often a shared task, it also carries high stakes (Beaufort, 2006). Client relations, corporate images, and legal decisions may all depend on skillful rendering of the written word. In that sense, workplace writing is very different from writing in school, where papers are written individually and closure comes when a grade has been given; afterward papers are often thrown away. In light of this disjunction between the writing that happens in schools and the writing needed to perform well at work, schools need to better align their writing demands with those of the workplace. As James Moffett, a seminal British writing researcher, remarked:

Writing has to be learned in school very much the same way that it is practiced out of school. This means that the writer has a reason to write, an intended audience, and control of subject and form. It also means that composing is stated across various phases of rumination, investigation, consultation with others, drafting, feedback, revision and perfecting. (Quoted in Nagin, 2003, pp. 10-11)

Moffett's comments highlight the inauthentic nature of much of the writing students do in school, where they are rarely required to write with a real purpose or for a real audience. Graham and Perin (2007a) explain in *Writing Next* that although flexible writing - writing in different genres and for different purposes and audiences - should be the primary goal of writing instruction in the schools, school writing is often too rigid to accommodate this goal. Writing in schools often focuses on the short essay, including spelling and grammar, rather than on expressing ideas in a variety of written forms. If effective writing requires mastery of a variety of cognitive processes and must be carried out in multiple contexts for multiple audiences, then educators need substantive directives on how to teach the skills and strategies necessary to make this happen.

We believe that several recent analyses of instructional interventions offer educators a useful map. In *Writing Next*, Graham and Perin (2007a) describe a number of instructional approaches that research has shown to be effective. However, they caution readers that these individual approaches do not constitute a writing curriculum and should instead be viewed as possible components of a comprehensive instructional program. It is important, then, for educators to choose from this array of effective strategies and to incorporate their chosen approaches into clearly articulated writing programs. Consulting empirical research to determine what is and is not effective is an important first step in this work.

Writing Next

Writing Next sets the ambitious goal of identifying the most effective, researchbased instructional approaches to writing. To accomplish this task, Graham and Perin (2007a) conducted the first systematic review of research on writing instruction since Hillocks's (1986) landmark study more than twenty years ago. Although they note that other reviews have focused on more narrow topics - such as the impact of word processing or the learning of academic content through writing, commonly referred to as "writing-to-learn" (Bangert-Drowns, 1993; Bangert-Drowns, Hurley, & Wilkinson, 2004) - *Writing Next* more broadly describes "specific practices that have demonstrated effectiveness" (Graham & Perin, 2007a, p. 13) for adolescents.

The methods employed in *Writing Next* distinguish it from *Reading Next* and from other reviews of adolescent writing research, such as recent reports by George Hillocks (2006, 2008). While literature reviews, like Hillocks's, rely on their authors' analytical skills and run the risk of reflecting author bias, the procedure of meta-analysis, like that used in *Writing Next*, gives researchers a systematic method for surveying the efficacy of a given intervention. The procedure allows researchers to calculate the impact (the effect size) of the intervention being studied. Then the effect size derived from each study of a particular instructional approach can be averaged to yield a measure of the effectiveness of that approach across many studies.

To appreciate the strengths and limitations of any meta-analysis, one must pay close attention to the criteria used by the researchers when selecting the studies. In the appendix of *Writing Next*, and in their more technical account of the study, Graham and Perin (2007c) recount their methodological decisions in detail. First, to ensure that the estimates were comparable across studies and relatively unbiased, the analysis only included experimental and quasiexperimental studies - in other words, those in which groups of students were assigned to different instructional conditions. Then, to be sure the methods applied to adolescents, Graham and Perin limited the studies to those of students in grades four through twelve. In addition, all of the studies selected needed to provide an overall or holistic measure of writing quality. The holistic measure tapped important features of writing, including organization, ideas, examples, and details. The only studies that did not use a holistic measure were those concerning summarization and writing to learn. The summarization studies depended on measures of accuracy and comprehensiveness as outcomes, and the writing-to-learn studies relied on various measures of content knowledge.

- Selecting and Categorizing the Studies

The authors' initial step in the process was to select the studies to analyze. Graham and Perin (2007a) initially focused on two broad areas - studies on learning to write and those concerned with writing to learn. In an effort to be inclusive, the authors cast a wide net, searching journals, dissertations, books, and conference proceedings, as well as studies indexed in previous meta-analyses.

When the studies were collected, the learning-to-write studies were further categorized into three broad categories: explicit instruction, instructional supports, and mode of instruction. After the categories were established, further organization occurred within each category as studies were grouped by their instructional approaches. Graham and Perin (2007a) used groupings from previous meta-analyses and borrowed terms from the database searches. To handle studies that did not fit into one of the predetermined groups, they developed a procedure for reviewing the articles, creating new groups, and revising the established ones. Once the categories were established and the articles sorted, the techniques of meta-analysis were then applied to each group. When there were four or more studies in each group, the effect size for that group was provided. The authors used Cohen's *d* as an effect-size statistic, which is simply the difference between the post-test mean scores of the comparison and treatment groups divided by the pooled standard deviation of both groups. To account for potential bias from studies with small samples, the authors also calculated weighted effect sizes using inverse variance weighting.¹

- Writing Next Findings

Graham and Perin (2007a) present the results of their inquiry in Writing Next as "the 11 key elements of adolescent writing instruction" (p. 15). The instructional approaches are ranked from the most effective (strategy instruction) to the least effective (writing for content learning), although it is important to recognize that sometimes only small differences separate them. They are briefly described below:

1. Writing Strategies: Explicit instruction in strategies for planning, revising, and editing (weighted Effect Size = 0.82). Several approaches to strategy instruction exist, but the Self-Regulated Strategy Development (SRSD) intervention (Harris & Graham, 1996) has received the most empirical support. It involves explicit instruction in writing strategies and self-regulation methods, mastery learning, and one-on-one instruction. For example, one approach to teaching students to plan a persuasive essay utilizes the TREE mnemonic, which stands for Topic sentence, Reasons, Examine reasons, and Ending. Students learn why the mnemonic is helpful; they learn to use it; they memorize it; and they have opportunities to practice applying it with support from the teacher before they use it on their own.

2. Summarization: Explicit instruction in how to summarize a reading (weighted Effect Size = 0.82).

3. Collaborative Writing: Group work focusing on the steps of the writing process (weighted Effect Size = 0.75).

4. Specific Product Goal: Specification of concrete, achievable goals for student writing (weighted Effect Size = 0.70).

5. Word Processing: Use of word-processing equipment during the writing process (weighted Effect Size = 0.55).

6. Sentence Combining: Explicit instruction in combining simple sentences into more sophisticated sentences (weighted Effect Size = 0.50).

7. Prewriting: Participation in various planning techniques before composing (weighted Effect Size = 0.32).

8. Inquiry Activities: Tasks designed to develop content knowledge applicable to a writing project, such as gathering and analyzing information (weighted Effect Size = 0.32).

9. Process-Writing Approach: Multifaceted instruction described by Graham and Perin (2007a) as "creating extended opportunities for writing; emphasizing writing for real audiences; encouraging cycles of planning, translating, and reviewing; stressing personal responsibility and ownership of writing projects; facilitating high levels of student interactions; developing supportive writing environments; encouraging self-reflection and evaluation; and offering personalized individual assistance, brief instructional lessons to meet students' individual needs, and, in some instances, more extended and systematic instruction" (p. 19) (weighted Effect Size = 0.32).

10. Study of Models: Exposure to models of good writing (weighted Effect Size = 0.25).

11. Writing for Content Learning: Using various writing activities to enhance students' acquisition of content-area knowledge (weighted Effect Size = 0.23).

Writing Next has much to offer researchers and teachers concerned with the current state of adolescent

writing instruction. First, the report provides a much-needed update to Hillocks's seminal meta-analysis. Since its publication in 1986, writing research has progressed, necessitating a careful, up-to-date review. On a practical level, the report has considerable value to teachers and teacher educators. As educators work to strengthen instructional techniques, Writing Next results offer a set of useful recommendations. Middle and high school teachers can apply the instructional elements in their classes selectively or in varying combinations, depending on students' needs. Furthermore, the strategies can be used by content-area teachers interested in using writing to teach specific content or to strengthen students' content-specific writing skills. The conclusions of this meta-analysis also have great value for teacher educators who work with writing teachers.

Moreover, Graham and Perin's (2007a, 2007c) descriptions of their metaanalysis provide excellent models of how to conduct and write about the analytic process. Graham and Perin take great pains to make their methods clear and transparent. They detail the methodological decisions they made during the study so that readers can decide for themselves whether the conclusions were justified by the analysis.

Another by-product of their transparency is that the limitations of the work are clear; in fact, the authors are forthright about them. One such limitation is the use of a holistic measure of writing quality as the outcome. Since the effectiveness of each intervention was assessed through this outcome, the strength of the conclusions depends on how accurately the outcome measures students' writing performance. This holistic focus may have obscured the impact of the instructional interventions on specific writing skills, such as spelling. Graham and Perin (2007c) also noted that the writing-quality measure differed across studies both in terms of how quality was defined and in terms of the holistic scale that was applied. Because of these differences across studies, the authors caution researchers to interpret the comparisons with care.

Perhaps the most significant limitation of the meta-analysis is that only experimental and quasi-experimental studies can be analyzed in a meta-analysis and, as a result, a large body of writing research could not be included in the Writing Next analysis. This constraint will certainly frustrate many teachers and researchers who may view the instructional recommendations in Writing Next as limited and unrepresentative of the wider body of writing research. In particular, readers who have studied the work of Nancie Atwell, Lucy Calkins, Peter Elbow, Donald Graves, and other advocates of process writing may be disappointed that these authors' rich descriptions of classroom instruction could not be included. However, Graham and Perin's (2007a) objective was to summarize what is known about the relationship between discrete writing interventions and measurable student outcomes, and it is therefore appropriate that they circumscribed the study as they did.

Readers with a process-writing perspective may also take issue with the list of specific strategies advocated in Writing Next. Some practices that are central to many depictions of process writing, particularly the writing workshop framework, do not receive attention in the report. One such practice is the writing conference, in which teachers meet with students individually to learn about their work, listen to their questions and concerns, and provide feedback and encouragement. Many teachers and teacher educators strongly believe in the efficacy of writing conferences. Nancie Atwell (1998), a middle school teacher who has written extensively about writing instruction, has stated emphatically that "writing conferences work" (p. 261). However, the support for Atwell's claim is not built on experimental evidence, and until more experimental and quasi-experimental research on practices such as conferencing occurs, their efficacy cannot be evaluated within the framework of a meta-analysis.

Additionally, readers who are well versed in the process-writing literature may be unfamiliar with some of the direct instructional approaches described in Writing Next, including writing strategy instruction such as Self-Regulated Strategy Development (SRSD) and instruction in setting specific writing goals. Both approaches include direct instruction by teachers in either specific writing strategies or goal-setting procedures. Although many early descriptions of process writing did not advocate direct instructional approaches, Pritchard and Honeycutt (2006) have noted that process writing is not incompatible with direct instruction. For example, many teachers use direct instructional methods during mini lessons to address written language conventions or complex processes such as planning and revising. Atwell (1998), too, sees the minilesson as a "forum for sharing [the teacher's] authority" (p. 150) and knowledge in a way that provides options for students. As Graham and Perin (2007a) suggest, it may be that process-writing approaches will provide a useful structure for teachers to integrate some of the specific strategies outlined in Writing Next.

Despite the omission of much of the instructional literature on process writing, the meta-analysis of experimental studies provides insight into the efficacy of this method. In their examination of the studies on the topic, Graham and Perin (2007a) found that process-writing instruction that included professional development for teachers - usually through the National Writing Project - was more effective than such instruction without teacher training. The finding that students write better when their teachers have more training seems intuitively obvious, but the implications for larger efforts to strengthen student writing through teacher training are substantial. However, before schools throw themselves into large-scale professional development efforts, Graham and Perin recommend that researchers examine the training more closely to determine its specific benefits for teachers.

Writing Next offers additional recommendations for process writing through its analysis of specific practices that are often taught as part of the writing process. For example, prewriting, collaborative writing, and sentence combining are frequently included in process-writing instruction (Nagin, 2003), and each of these was found to have positive effects on student writing. One of the challenges of evaluating the strength of a process approach to instruction is that there is no one, agreed-upon application of process instruction. Instead, it can incorporate a wide variety of practices, as seen in Graham and Perin's (2007a) expansive definition of process instruction. As Pritchard and Honeycutt (2006) note, the process approach has even changed or evolved over time. In order to demonstrate the specific benefits of process writing, researchers need to disentangle the unique effects of each practice (Pritchard & Honeycutt, 2006).

Although Writing Next provides a state-of-the-art analysis of the contemporary experimental and quasi-experimental research on adolescent writing instruction, there are limitations in its inclusiveness attributable to the use of a meta-analysis. Graham and Perin recognized the magnitude of these limitations and conducted a follow-up study designed to address them.

After Writing Next

Less than a year after the publication of Writing Next, Graham and Perin (2007b) undertook another meta-analysis of single-subject design studies and analyzed selected qualitative studies for common themes. This additional research, which was recently published in *Scientific Studies of Reading*, addressed the central question of Writing Next: What does the available research say about effective instruction for teaching adolescents to write?

Single-subject design studies were not included in Writing Next because of the small samples used and because effect sizes are calculated differently in such studies. Instead of a control group, single-subject design studies use each participant as his or her own control. This is done by measuring performance on a writing task before, during, and after the introduction of an instructional technique. If writing performance improves after a student participates in a new instructional activity, then the improvement is attributed to the instruction. This body of research is valuable for writing researchers because nearly all the single-subject design studies Graham and Perin (2007b) identified were conducted with struggling writers, some of whom were diagnosed with learning disabilities.

The results of their second meta-analysis both underscore and extend the findings of Writing Next. Like previous results, strategy instruction appeared to be the most effective intervention, while use of a word processor demonstrated a moderate effect. Several other approaches also demonstrated small but positive effects on writing proficiency, including teaching students to monitor and track a particular feature of their writing, such as the number of words written. This approach frequently also includes teaching students to graph their performance so that they can easily track their own progress. In addition, direct instruction of specific skills using techniques such as teacher modeling and student practice with teacher supervision had a positive relationship to students' proficiency with the skills being taught. Instruction in grammar was positively related to growth in students' grammar skills but not to overall improvements in writing quality. Finally, behavioral reinforcement, which included "either social praise, tangible reinforcement, or both" (Graham & Perin, 2007b, p. 323), was associated with small improvements in the specific skills being reinforced.

In the same article, Graham and Perin (2007b) also moved beyond the meta-analytic techniques of Writing Next by conducting a review and synthesis of qualitative research exploring writing or literacy instruction. Specifically, they selected qualitative studies focusing on exceptional teachers and schools serving students in grades four through twelve. The relevant research was identified during their original searches for Writing Next, which yielded five publications authored by literacy researcher Michael Pressley and his colleagues. In their analysis of the studies, Graham and Perin identified ten themes that were common across the descriptions of writing activity. These themes provided additional support for the recommendations made in Writing Next and the single-subject design meta-analysis. Most themes reflect the necessity of approaching writing as a process, teaching students strategies for the steps of the writing process (e.g., steps for planning a story or editing a persuasive essay), providing appropriate scaffolding, and creating a motivating, engaging, and supportive writing environment.

Overall, then, Graham and Perin's (2007b) follow-up to Writing Next supports their original findings and also identifies other effective teaching strategies, including practices such as self-monitoring. In addition, it offers a thoughtful discussion about the topics and problems that writing researchers need to investigate to push the field forward. The authors note that more research is sorely needed to test new instructional approaches and to validate current approaches in different contexts. They also call for writing research to enrich our understanding of "what dose of each treatment is optimal, how these treatments are best combined, and what combination of treatments work [sic] best for which adolescents" (Graham & Perin, 2007b, p. 328).

By conducting these analyses, Graham and Perin acknowledge (2007b) the limits of their initial meta-analysis and offer a response to critics who might believe that Writing Next focuses too narrowly on experimental research. However, their analysis of a small number of qualitative studies is clearly too narrow to accurately represent studies in this area. Furthermore, it is unclear why additional research that does

examine effective schools and teachers was not included (e.g., Langer, 2000, 2001). A broader synthesis of qualitative studies certainly seems warranted, considering the small number included in this synthesis. Although several recent reviews of writing research have focused exclusively or predominantly on qualitative research, a broader synthesis is still needed because not all recent reviews target adolescent writing (Schultz, 2006), and others devote relatively little attention to recent qualitative work (Hillocks, 2006, 2008). In particular, we would like to see a synthesis of studies that position writing as collaborative and constructive - much like the writing that goes on in the workplace - as well as a synthesis of studies examining direct-instruction models. Such syntheses might include qualitative research on adolescent writing (with attention to teacher behavior and student attitudes toward writing) and might also include qualitative studies that examine how cognitive strategy instruction becomes integrated into whole-class instruction. However, we recognize that before it is possible to do many of these syntheses, much more qualitative research needs to focus specifically on these issues.

The Great Divide: Instruction, Teacher Preparation, and Assessment

The Graham and Perin (2007a, 2007b) studies examining writing instruction for adolescents offer a powerful synthesis of experimental and single-subject design research, as well as a partial survey of relevant qualitative research. However, any attempts to position these conclusions as being representative of the broad field of writing research and practice will certainly meet resistance due to a number of stark divisions in the field.

A major rift divides researchers into opposing groups with different theoretical orientations, methods, professional organizations, and standards. As Graham and Perin (2007b) note, the groups can be broadly characterized as associated either with educational psychology or with composition studies. The educational psychologists, like Graham and Perin, favor quantitative methods and cognitive developmental theories. Much of their research examines writing in elementary or secondary settings and they frequently work in education or psychology departments. Scholars from a composition studies tradition, such as Hillocks, privilege qualitative methods and sociocultural theories. The majority of their work explores writing in college or high school settings, and these scholars are often affiliated with English departments. The bright line separating these groups is obvious - only 4 percent of the citations in Writing Next also appear in Hillocks's (2008) most recent review of secondary writing, even though both reviews target adolescent writing.

Despite the theoretical and methodological divisions between composition researchers and educational psychology researchers, many of the Writing Next recommendations should be familiar to members of both groups. For example, much of the research on strategy instruction and setting specific writing goals has been published in journals frequently read by educational psychologists. Similarly, research on collaborative writing and inquiry activities can be found in journals read by researchers associated with composition studies. It may be that the Writing Next recommendations serve a dual function for many writing researchers, affirming their support for familiar instructional practices while simultaneously challenging researchers to expand their notions of effective writing instruction.

Although the divide among researchers is wide, it is certainly not the only one in the field. The academic discussions within, and occasionally across, the communities of writing researchers may not inform the preparation and professional development of middle and high school teachers. Much of the research on writing is produced by scholars in research-intensive colleges and universities, and little of it is conducted by scholars in teacher-preparation programs. As a result, students preparing to be teachers may not be reading and discussing the most current literature on writing instruction. When teachers complete their training and enter the classroom, they may begin teaching without the breadth and depth of understanding needed to carry out effective writing instruction.

This gap in teacher knowledge is particularly problematic because there are troubling inequities in writing skill among adolescent writers, and teachers without deep training in writing instruction cannot respond to the needs of these students. Hillocks's (2008) review of recent NAEP writing assessments revealed wide performance gaps attributed to socioeconomic status, ethnic group, and gender. He issued an ominous warning: This is "a problem that we ignore at our peril" (p. 327). Despite this performance disparity, researchers have only begun to explore instructional approaches designed to address the needs of struggling writers. Research on strategy instruction has shown that it can be effective with writers who struggle (Graham & Harris, 2003). However, there are many unanswered questions about how the writing context, the instructional approach, and the factors unique to each student may contribute to writing performance (Graham & Perin, 2007c). Ultimately, writing researchers must design instructional interventions responsive to the needs of all writers, including those who struggle, and they must effectively disseminate this information to classroom teachers and instructional leaders.

Another substantial divide exists when we compare the kinds of writing required of adolescents in school with those required of adults in the workplace. As we noted in the introduction, the hallmark of effective writers in the workplace is their ability to adapt to the demands of various writing tasks. This skill is necessary because much of the writing produced in the workplace has a practical communicative function, involves collaborative construction, and addresses a specific audience (Beaufort, 2006). Since these conditions are rarely static, writers must adapt their processes and products to the task. This requirement

stands in contrast to the unique rhetorical characteristics of many school writing assignments, where the development of writing with a real purpose and for real audiences often does not exist. In his seminal discussion of the role of audience in writing, literacy theorist Walter Ong (1975) addressed one such inauthentic assignment, "How I Spent My Summer Vacation," and the problem that this traditional narrative task creates for a writer:

If the student knew what he was up against . . . he might ask "Who wants to know?" The answer is not easy. Grandmother? He never tells grandmother. His father or mother? There's a lot that he would not want to tell them, that's sure. . . . The teacher? There is no conceivable setting in which he could imagine telling his teacher how he spent his summer vacation other than in writing this paper, (p. 11)

Ong's question - "To whom does this student address such a writing assignment?" - has a clear answer. The student addresses a fictionalized audience constructed in his mind because there is no conceivable audience for such writing in reality. Although the "summer vacation" assignment may no longer reflect the majority of school writing tasks, it is important to understand that workplace writing is essentially social in nature and that the needs of real audiences must be taken into account (Beaufort, 2006). The decontextualized type of writing that is too often practiced in schools can leave students unprepared for the actual demands of the workplace.

Although there are many wide divisions in the field, writing researchers and teachers share the desire to deepen our understanding of adolescent writing and to make instruction stronger and more relevant. To that end, we would like to make some recommendations about how research and practice can address the divisions in adolescent writing, help teachers and researchers reduce their tolerance for "negative capability," and provide some clarity about the mysteries and uncertainties surrounding effective writing instruction. Some suggestions echo those offered by Graham and Perin (2007a, 2007b, 2007c), while others point in new directions. Our recommendations follow the structure outlined by the RAND Reading Study Group (2002) in its report on reading comprehension. Although there are substantial differences between reading comprehension and writing, the two have similar needs, which include attention to instruction, teacher preparation, and assessment.

Instruction

To strengthen writing instruction for adolescents, researchers need to address a broad range of questions. Some of the most pressing questions speak to what might be called the "writing divide" that separates strong writers from those who struggle. As Graham and Perin (2007b) point out, research on cognitive strategy instruction, in particular the Self-Regulated Strategy Development model (Harris & Graham, 1996), has shown considerable promise when used with struggling writers. However, more research is needed to explore the efficacy of strategy instruction with students in varying instructional contexts, such as whole-class instruction versus small-group or individualized instruction. Also, research on strategy instruction needs to be expanded to include students at all grade levels because it has almost exclusively taken place in the elementary grades. Finally, researchers need to explore which of the many components of strategy instruction provide the greatest benefit for students (Graham & Perin, 2007b). It may be that the most beneficial components can be integrated into other instructional approaches in productive ways.

Graham and Perin (2007b) also note that "effective writing instruction for adolescents is not just a 4th-through 12th-grade issue" (p. 328). Struggling adolescent writers might have avoided their difficulties if they had received better writing instruction in earlier grades. By focusing resources on developing high-quality writing instruction for young children, teachers and researchers may help children build strong writing skills so that future difficulties can be averted, or at least reduced.

In addition, considering that struggling writers may include learning disabled students, ethnic minorities, students from low-socioeconomic-status households, and English-language learners (Hillocks, 2008), it seems highly unlikely that only a single instructional approach - or even several - may be sufficient to meet their varying needs. Researchers must be committed to investigating how teachers can address the diverse needs of students who have unique sets of skills, different social worlds, and different patterns of language use. Until we can know better how varying instructional methods support diverse students, inequities in writing instruction are likely to persist.

Another barrier to developing effective instructional approaches is our limited theoretical understanding of writing proficiency and how it develops. With more detailed theories of how cognitive, social, and motivational forces interact as writers develop their skills over time, researchers could create instructional methods that are sensitive to writers' needs (Graham & Perin, 2007b).

To help students develop into more flexible writers who can adjust to the demands of the workplace, writing instruction needs to bridge the gap between school and workplace writing. A more specific focus on creating meaningful writing assignments that have real purposes and real audiences outside of the classroom context is needed (Beaufort, 2006; Hillocks, 2002). Teachers may need to change more than the demands of the assignments; they may also need to change the way students work to allow for wider collaboration and the integration of technological writing tools.

Teacher Preparation

Any comprehensive effort to strengthen writing instruction must include attention to the training of preservice teachers and the continuing education of current teachers. During their course work and school placements, preservice teachers need instruction in a wide variety of evidence-based writing practices (Graham & Perin, 2007b). In many teacher-education programs, including our own, literacy courses devote substantially more attention to reading instruction than to writing instruction. One explanation for this disparity is the deeper body of reading research (Graham & Perin, 2007a). However, in the last twenty years, much has been learned about the writing process, predictors of writing success, and effective approaches to writing instruction (Graham, 2006). Before they enter the classroom, preservice teachers should be well versed in the research on writing development and writing instruction. In their school placements they should have opportunities to design writing lessons and receive constructive feedback from instructors and instructional leaders who are familiar with the extant writing literature. Opportunities to read the writing research should not be limited to prospective elementary school or English teachers. Since writing can be a tool for learning, and many content-area teachers have writing assignments in their courses, content-area teachers should also receive training in writing development and instruction.

Of course, teacher educators also need to be familiar with current writing research. Two factors currently prevent this from happening. The first is the relative scarcity of writing researchers. If more researchers pursued writing-related questions, there would be more writing researchers to teach preservice teachers or to work with teacher educators. A second impediment was characterized earlier as the divide between writing researchers and teacher educators. If better communication existed between these groups, perhaps through professional journals or conferences, then one would expect teacher educators to include more current writing research in their courses.

While training preservice teachers is clearly important, a parallel effort needs to be made for current teachers across the content areas. Since many teachers report entering the classroom with little or no preparation to teach writing - and few states require course work in teaching writing for licensure (Nagin, 2003) - many operate in what Keats called "negative capability" as they learn and create methods and material to teach writing (Grossman, 1990). Once teachers build a repertoire for writing instruction, they may be reluctant to abandon it for new practices (RAND Reading Study Group, 2002). To further complicate matters, given the lack of agreement about how to teach writing, it is likely that teachers are employing diverse approaches to instruction. Until there is better data on how writing instruction currently occurs in classrooms - both English language arts and content-area classrooms - designing high-quality professional development will be a struggle. Furthermore, a spate of questions needs to be answered about how to make professional development effective. We leave to others the task of answering those questions; however, we do want to stress that professional development for writing instruction must build on the most successful existing professional development models.

Assessment

A final important area in need of attention from researchers and teachers is writing assessment. Currently, writing assessment plays an integral role in high-stakes tests, both at the state level and on national tests used for college placement, such as the SAT. One persistent challenge for assessment designers is creating a writing test that is authentic and that taps the full complexity of writing. For example, Hillocks (2002) reported that most state writing assessments allow students a limited time to produce an essay or story responding to a prompt.² The prompts offer little background information for test-takers to use in constructing their responses, but this lack of background information is intentional because essays are graded for their structure and mechanics more than for their content. Furthermore, Hillocks found that the model essays published by testing agencies contained poor examples of elaboration and weak and even incorrect evidence. The most problematic result of instituting writing assessments that ignore key features of writing, such as the content, is its impact on instruction as teachers align their writing expectations to the state tests.

Assessments that judge writing as separate from content are particularly troubling, because research suggests that writing should not be considered a subject unto itself but should be fully integrated into the content areas, including math and science (Chapman, 1990). Research also shows that writing is an important means to enhance learning in the content areas (Graham & Perin, 2007a). Therefore, writing that is divorced from content - even though this is a feature of many state and national writing assessments (Hillocks, 2008) - is a type of mandated extension of the decontextualized school writing that Ong complained about (1975). However, along with Ong's fictionalized audience, students now find themselves fictionalizing the writing process - because of the "one-shot," time-constrained nature of the tests - and fictionalizing the support they must use to address subjects about which they know very little (Hillocks, 2002, 2008).

Since writing assessment influences instruction and has real consequences for students, researchers need to turn their attention to the design of writing tests or alternate forms of evaluation to align these assessments with the goals of flexible and authentic writing. First, new writing assessments need to

overcome the decontextualized and inauthentic format of many current writing prompts. In addition, assessment methods need to be flexible enough to accommodate the varied writing practices used by students, which may involve searching for relevant information, using technological scaffolds, and perhaps even working collaboratively.

Although writing assessment is a thorny problem with which educators continue to struggle, several educators and writing researchers have suggested ways to make writing assessments more authentic. For instance, Chapman (1990) has suggested that writing assessments should include various types of writing at varying levels of difficulty in order to approximate more closely the writing demands of the workplace. These types might include open-ended essays that draw from students' background and experiences, short-answer writings, or alternative compositions that specifically target parts of the writing process, like planning or revising. Assessments that are attuned to this process could help align effective classroom practice with what policymakers seek to measure. Chapman (1990) and Hillocks (2002) both suggest that student writing portfolios, which are compilations of students' writing over long periods of time, can provide a more comprehensive picture of a student's writing ability, give students a more purposeful and authentic writing experience, and allow teachers a useful tool for tracking growth in students' writing skills over time. In addition, Murphy and Yancey (2008) point out that portfolios offer some solutions to several of the limitations of relying on a single writing assessment to evaluate writing proficiency. These disadvantages include factors such as imposing time limits on writers, which may penalize students who write slowly; using a single measure to assess proficiency, which may not provide a robust measure of a student's skill; and specifying the topic of the text, which may differentially impact students depending on their background knowledge.

Although portfolios appear to hold some promise for assessment, researchers have raised questions about whether they can be scored reliably. Evaluative research done on Vermont's portfolio system has revealed relatively low reliability among the raters (Koretz, Stecher, Klein, & McCaffrey, 1994). Low reliability is unacceptable when portfolio scores are used to make high-stakes decisions about a student's future or a school's progress. However, other researchers have achieved higher levels of interrater reliability with portfolios. For example, Underwood and Murphy (1998) report fairly high reliability when portfolios were scored by teachers familiar with the writing curriculum. It may be that research that explores in greater detail how the raters' knowledge of the writing task and of the scoring system impacts their assessment of a portfolio can productively address the reliability problems of portfolio assessment (Murphy & Yancey, 2008).

Research on writing assessment also needs to address diagnostic measures teachers use to identify struggling writers. Currently, teachers have few curriculum-based writing measures or other resources that allow them to assess a student's writing performance quickly and accurately (McMaster & Espin, 2007). A comprehensive research effort needs to be launched to identify measures that are linked to current theoretical models of writing development and are also sensitive to growth over time. Such measures would have immense practical value because they would allow teachers to track student progress and to identify struggling writers who might benefit from more-intensive instruction. Furthermore, researchers could use such measures to evaluate the impact of new instructional models and practices.

Conclusions

To mitigate writing teachers' need for "negative capability" in confronting the mystery of good writing instruction, a broad and comprehensive initiative in writing research must be undertaken. We have attempted to outline some of the issues that deserve investigation, but as we have tried to convey in this article, writing is a diverse field with many open questions and many potential opportunities for innovative research and teaching. However, as Graham and Perin (2007b) have noted, a necessary prerequisite for such an initiative is funding, which would stimulate research and encourage more attention to the important problems that remain.

The flexibility researchers need to investigate these problems is as important as funding to move this work forward. We need good communication to bridge the divide in writing research between the scientific approaches that identify effective interventions and the more-descriptive and qualitative approaches that demonstrate how these interventions are used in real classrooms by real teachers. And, just as important, we need to be able to think flexibly about how to communicate this knowledge to preservice and inservice teachers. As Keats (1979) once stated, "There is not a fiercer hell than the failure in a great object" (p. 802). In our opinion, there is no greater object than building effective writing programs that will equip young people to succeed in school, to contribute to a vibrant global economy, and to participate in an increasingly pluralistic civic life - all facilitated by the power of the written word.

References

- ACT. (2005). Crisis at the core: Preparing all students for college and work. Retrieved November 28, 2007, from http://www.act.org/path/policy/pdf/crisis_report.pdf
- Atwell, N. (1998). *In the middle: New understandings about writing, reading and learning* (2nd ed.). Portsmouth, NH: Boynton/Cook.

Bangert-Drowns, R. (1993). The word processor as an instructional tool: A meta-analysis of word processing in writing instruction. *Review of Educational Research*, 63, 69-93.

Bangert-Drowns, R. L., Hurley, M. M., & Wilkinson, B. (2004). The effects of school-based writing-to-learn interventions on academic achievement: A meta-analysis. *Review of Educational Research*, 74, 29-58.

Beaufort, A. (2006). Writing in the professions. In P. Smagorinsky (Ed.), *Research on composition: Multiple perspectives on two decades of change* (pp. 217-242). New York: Teachers College Press.

Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum.

Biancarosa, G., & Snow, C. E. (2004). *Reading next: A vision for action and research in middle and high school literacy* (A report from the Carnegie Corporation of New York). Washington, DC: Alliance for Excellent Education.

Chapman, C. (1990). Authentic writing assessment. *Practical Assessment, Research and Evaluation*, 2(7). Retrieved November 28, 2007, from <http://PAREonline.net/getvn.asp?v=2&n=7>

De La Paz, S. (1997). Strategy instruction in planning: Teaching students with learning and writing disabilities to compose persuasive and expository essays. *Learning Disability Quarterly*, 20, 227-248.

Ferretti, R. P., MacArthur, C. A., & Dowdy, N. S. (2000). The effects of an elaborated goal on the persuasive writing of students with learning disabilities and their normally achieving peers. *Journal of Educational Psychology*, 92, 694-702.

Graham, S. (2006). Writing. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 457-478). Mahwah, NJ: Lawrence Erlbaum.

Graham, S., & Harris, K. R. (1988, April). Improving learning disabled students' skills at generating essays: Self-instructional strategy training. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Graham, S., & Harris, K. R. (1999). Assessment and intervention in overcoming writing difficulties: An illustration from the self-regulated strategy development model. *Language, Speech, and Hearing Services in Schools*, 30, 255-264.

Graham, S., & Harris, K. R. (2003). Students with learning disabilities and the process of writing: A meta-analysis of SRSD studies. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of research on learning disabilities* (pp. 383-402). New York: Guilford Press.

Graham, S., & Perin, D. (2007a). *Writing next: Effective strategies to improve writing of adolescents in middle and high school*. Washington, DC: Alliance for Excellent Education.

Graham, S., & Perin, D. (2007b). What we know, what we still need to know: Teaching adolescents to write. *Scientific Studies of Reading*, 11, 313-335.

Graham, S., & Perin, D. (2007c). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, 99, 445-476.

Grossman, P. (1990). *The making of a teacher: Teacher knowledge and teacher education*. New York: Teachers College Press.

Harris, K. R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation* (2nd ed.). Cambridge, MA: Brookline Books.

Harris, K. R., & Graham, S. (1999). Programmatic intervention research: Illustrations from the evolution of self-regulated strategy development. *Learning Disability Quarterly*, 22, 251-262.

Harris, K. R., Schmidt, T., & Graham, S. (1997). Every child can write: Strategies for composition and self-regulation in the writing process. In K. R. Harris, S. Graham, D. Deshler, & M. Pressley (Eds.), *Teaching every child every day: Learning in diverse schools and classrooms* (pp. 131-167). Cambridge, MA: Brookline Books.

- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 1-28). Mahwah, NJ: Lawrence Erlbaum.
- Hillocks, G. (1986). *Research on written composition: New directions for research*. Urbana, IL: National Conference on Research in English and ERIC Clearinghouse on Reading and Communication Skills.
- Hillocks, G. (2002). *The testing trap: How state writing assessments control learning*. New York: Teachers College Press.
- Hillocks, G. (2006). Middle and high school composition. In P. Smagorinsky (Ed.), *Research on composition: Multiple perspectives on two decades of change* (pp. 48-77). New York: Teachers College Press.
- Hillocks, G. (2008). Writing in secondary schools. In C. Bazerman (Ed.), *Handbook of research on writing: History, society, school, individual, text* (pp. 311-330). New York: Lawrence Erlbaum.
- Keats, J. (1975). Four letters. In C. Kaplan (Ed.), *Criticism: The major statements* (pp. 349-350). New York: St. Martin's Press.
- Keats, J. (1979). Endymion. In M. H. Abrams (Ed.), *The Norton anthology of English literature*, (Vol. 2, 4th ed., pp. 802-806). New York: W. W. Norton.
- Koretz, D., Stecher, B., Klein, S., & McCaffrey, D. (1994). The Vermont portfolio assessment program: Findings and implications. *Educational Measurement: Issues and Practice* 13(3),5-16.
- Langer, J. A. (2000). Excellence in English in middle and high school: How teachers' professional lives support student achievement. *American Educational Research Journal*, 37, 397-439.
- Langer, J. A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal*, 38, 837-880.
- McMaster, K., & Espin, C. (2007). Technical features of curriculum-based measurement in writing: A literature review. *The Journal of Special Education*, 41(2), 68-84.
- Murphy, S., & Yancey, K. B. (2008). Construct and consequence: Validity in writing assessment. In C. Bazerman (Ed.), *Handbook of research on writing: History, society, school, individual, text* (pp. 365-385). New York: Lawrence Erlbaum.
- Nagin, C. (2003). *Because writing matters: Improving student writing in our schools*. San Francisco: Jossey-Bass.
- National Commission on Writing. (2004). *Writing: A ticket to work ...ora ticket out: A survey of business leaders*. Retrieved November 5, 2007, from <http://www.writingcommission.org/report/html>
- National Commission on Writing. (2005). *Writing: A powerful message from state government*. Retrieved November 7, 2007, from <http://www.writingcommission.org/report/html>
- Ong, W.J. (1975). The writer's audience is always a fiction. *Publications of the Modern Language Association*, 90, 9-21.
- Persky, H. R., Daane, M. C., & Jin, Y. (2003). *The nation's report card: Writing 2002, NCES 2003*. Washington, DC: National Center for Educational Statistics.
- Pritchard, R. J., & Honeycutt, R. L. (2006). The process approach to writing instruction: Examining its effectiveness. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 275-290). New York: Guilford Press.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward an RUFID program in reading comprehension*. Santa Monica, CA: Science and Technology Policy Institute, RAND Education.
- Schultz, K. (2006). Qualitative research on writing. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 357-373). New York: Guilford Press.
- Underwood, T, & Murphy, S. (1998). Interrater reliability in a California middle school English/language arts portfolio assessment program. *Assessing Writing*, 5, 201-230.

Drawing on their experiences as high school writing instructors, researchers, and teacher trainers, David Coker and William Lewis examine an often overlooked dimension of adolescent literacy: writing proficiency. The authors explore recent research on the skills and strategies students need in order to write with competence and describe analyses of interventions that help students attain writing mastery. They also address divisions and gaps in the field of writing research and instruction and offer suggestions for overcoming these rifts in order to advance understanding of adolescent writing development and effective writing instruction. [PUBLICATION ABSTRACT]

Copyright Harvard Educational Review Spring 2008 | Notes | 1. Graham and Perin also analyzed whether there was a relationship between the total quality of the study (as indicated by a range of measures, such as publication type and whether random assignment was used) and the magnitude of the effect size, but found no relationship. | 2. Since Hillocks's (2002) study, some state writing tests have incorporated more authentic assessments. One example is the Massachusetts state test, the MCAS, which includes short-answer, open-response, and stand-alone writing prompts in several subjects. | DAVID COKER | WILLIAM E. LEWIS | University of Delaware | DAVID COKER is an assistant professor in the School of Education at the University of Delaware. He teaches undergraduate and graduate courses in writing, reading, and language development. Coker's research focuses on several topics, including writing development, writing assessment, writing instruction, and the connection between reading and writing. His interest in literacy development grew out of his experiences teaching English in an alternative high school in Atlanta and his work with elementary and middle school students in Cambridge, Massachusetts. | WILLIAM E. LEWIS is an instructor in the School of Education at the University of Delaware. He teaches undergraduate and graduate courses in reading and writing in the content areas, young adult literature, and instructional models. Lewis's research focuses on persuasive writing and argument, including research into how older students read, respond to, and write critically about literary texts. Lewis previously taught English for twenty years in Pennsylvania public schools, which nurtured his interest in adolescent writing development and instruction.

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